In the claims:

Claim 1 (original): A method of fabricating a Schottky diode, comprising the steps of:

forming a first layer of insulative material having a first etch rate over the surface of a semiconductor substrate;

forming a second layer of insulative material having a second etch rate, the second etch rate being greater than the first etch rate, over the first layer of insulative material;

etching, in a single etching step, a window through the first and second layers of insulative material to the semiconductor substrate, the window forming walls having a topology of stepped thickness of insulative material due to the etch rates differing; and

depositing a metal in the etched window to form a metal-semiconductor substrate contact, the metal conforming to the topology of the walls of the etched first and second layers of insulative material in the window and the semiconductor substrate to form a stepped structure.

2. (original) The method as recited in claim 1, wherein the step of forming a first layer of insulative material comprises forming an insulative layer having a thickness of 350 to 400 angstroms.

3. (original) The method as recited in claim 1, wherein the step of forming a first layer of insulative material comprises forming a layer of oxide.

4. (original) The method as recited in claim 1, wherein the step of forming a first layer of insulative material comprises forming a layer of TEOS oxide by a low pressure chemical vapor deposition process.

5. (original) The method as recited in claim 1, wherein the step of forming a first layer of insulative material comprises forming a layer of TEOS oxide having a thickness of approximately 350 to 400 angstroms.

6. (original) The method as recited in claim 1, wherein the step of forming a second layer of insulative material comprises forming an insulative layer having a thickness of approximately 600 angstroms.

7. (original) The method as recited in claim 1, wherein the step of forming a second layer of insulative material comprises forming a layer of oxide.

8. (original) The method as recited in claim 1, wherein the step of forming a second layer of insulative material comprises forming a layer of TEOS oxide by a plasma enhanced chemical vapor deposition process.

9. (original) The method as recited in claim 1, wherein the step of forming a second layer of insulative material comprises forming a layer of TEOS oxide having a thickness of approximately 600 angstroms.

10. (original) The method as recited in claim 1, further comprising the step of forming a third layer of insulative material over the second layer of insulative material, the etching step also etching through the third insulative layer, and the depositing step also depositing metal on walls of the etched third layer of insulative material.

11. (original) A method as recited in claim 10, wherein forming the third layer of insulating material comprises applying the third layer of insulating material by a plasma enhanced chemical vapor deposition process.

12. (original) A method as recited in claim 1, wherein forming the third layer of insulating material comprises applying a layer of phosphorus doped oxide.

13. (original) The method as recited in claim 1, further comprising the step of forming a fourth layer of insulative material over the third layer of insulative material, the etching step also etching through the fourth insulative layer, and the depositing step also depositing metal on walls of the etched fourth layer of insulative material.

14. (original) A method as recited in claim 13, wherein forming the fourth layer of insulative material comprises applying a layer of boron and phosphorus doped oxide.

15. (original) A method as recited in claim 13, wherein forming the fourth layer of insulative material comprises applying a layer of oxide by a plasma enhanced chemical vapor deposition process.

Claims 16-31 (canceled).

Respectfully,

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